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CONSUMPTION OF PRIMARY OR VIRGIN TIN IN THE UNITED STATES, 1927[1]

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Early in 1928 a canvass to ascertain the amount of tin consumed by each of the various uses in the United States during 1927 was undertaken in response to an active demand by industry for further information on the subject. In the United States the consumption of tin requires annual imports amounting to about half of the world production of that metal. The results of this inquiry, wherein effort was made to eliminate figures relating to secondary tin, account for 68,797 long tons of primary tin, a quantity equivalent to 96.7 per cent of the imports in the same year. The results tabulated below are based on the reports of 1,050 concerns.

In the manufacture of tin plate and terneplate, the principal tin consumers, 24,527 long tons of primary tin were used, accounting for 35.65 per cent of the total consumption of primary tin in the United States in 1927. Next in order of magnitude as a consumer is solder, which required 13,734 long tons, or 19.96 per cent of the total. The manufacture of babbitt required 8,705 long tons, or 12.66 per cent of the total consumption, and foil and collapsible tubes consumed 6,903 long tons, or 10 per cent of the total.

A canvass made by the Bureau of Mines in 1926 of the tin consumed in the United States in 1925 accounted for consumption of 117,406 long tons of tin, including both primary and secondary tin. This amount is approximately 13,000 long tons in excess of the indicated supply that became available in that year. Concerning this excess, Information Circular 6019, "Consumption of Tin in the United States, 1925," says:

> "Unquestionably, however, a part of this unaccounted for metal may be attributed to the short service rendered by the finished article and the rapidity with which it finds itself again in the melting pot; thus the metal may be reused several times during a year. An inference that might be drawn from the study is that the accumulated free stocks of tin are never high."

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Consumers' stocks available for use in 1925 and the consumers' drafts on these stocks could not be determined. Therefore it is impossible to gauge the extent to which the use of stocks entered into the apparent excess. Furthermore, a part of this excess is probably ascribable both to errors in the reports of the consuming concerns and to errors in interpretation of these reports. Such errors are inherent in first studies of this kind and only repeated canvasses can eventually eliminate them.

Because of the reasons given and because in compiling the following table every effort was made to include only figures relating to primary or virgin tin, the figures herein presented for consumption in 1927 are not comparable either with those presented in Bureau of Mines Circular 6019, or those relating to 1917 compiled by the War Industries Board.

The Bureau of Mines will continue its effort to determine the annual consumption of tin. It is planned to include in the canvass relating to 1928 the consumption of secondary tin and consumers' stocks, in order that satisfactory data on the total tin consumption of the United States may be established.

Primary or Virgin Tin Consumed by Various Uses in the United States During 1927

Uses	Long tons	Per cent
Tin plate and Terneplate	24,527.5	35.65
Solder	13,734.7	19.96
Babbitt	8,705.9	12.66
Foil	4,193.4	6.10
Bronzes and brasses	2,988.9	4.34
Castings	2,974.1	4.32
Collapsible tubes	2,709.6	3.94
Tinning brass, copper tubes, sheets or shells, nails, etc.	2,657.1	3.86
Chemicals	2,620.5	3.81
White metal	850.0	1.24
Tin oxide	721.1	1.05
Type metal	449.9	0.65
Other alloys	176.3	0.26
Miscellaneous	1,488.0	2.16
Total	68,797.2	100.00

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